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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,862

03/23/2005

Shiv Kumar

PB0371

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EXAMINER

SOLOLA, TAOFIQ A

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

08/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,862

Applicant(s)

KUMAR ET AL.

Examiner

Taofiq A. Solola

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 13-29 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 13-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1625

Claims 13-29 are pending in this application.

Claims 1-12 are canceled.

Claims 28-29 are drawn to non-elected invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., US 5,863,727, in view of, Burdette et al., J. Ame. Chem. Soc. (2001) Vol 123, Pages 78341-7841.

Applicant claims fluorescein dyes of formula II having linkers to acceptor dyes. The acceptor dyes are xanthine, rhodamine and cyanine dyes.

Determination of the scope and content of the prior art (MPEP 2141.01)

Lee et al., teach fluorescence dyes having a generic formula, which embraces the instantly claimed dyes. The dyes can be linked to xanthine, rhodamine and cyanine dyes. See col. 4, lines 20-38, col. 7, line 27, col. 8, lines 17-65 and the examples.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The difference between the instant invention and that of Lee et al., is that applicant claims dyes that are sub-generic of the generic formula by Lee et al.

Finding of prima facie obviousness--rational and motivation (MPEP 2142.2413)

However, Burdette et al., teach fluorescence dyes that are similar to the instantly claimed dyes useful as sensors for zinc. See examples in pages 7835-36. Therefore, the

Art Unit: 1625

instant invention is prima facie obvious from the teachings of Lee et al., and Burdette et al. One of ordinary skill in the art would have known to claim dyes wherein R11 and R14 are amine at the same time Y1 is OH and Y2 is oxygen, from the generic teaching of Lee et al. The motivation is from the teaching of Burdette et al., that compounds having these sub-combinations have fluorescence property.

Applicant's arguments filed 7/18/07 have been fully considered but they are not persuasive. Applicant contends that the compounds of Lee et al., are not coupled to acceptor dyes at positions R11 and R14 at the same time and therefore are not bis-aminomethyl fluorescence derivatives. This is not persuasive because there is nothing in the specification of Lee et al., that suggests this assertion. In fact the generic formula of Lee et al., embraces bis-aminomethyl derivatives. Applicant further argues that Burdette et al., fail to disclose bis-aminomethyl fluorescence derivatives, R1 may be H in the instant compounds, and that the compounds of Burdette have different uses and properties. This is not persuasive because when R1 is not H, the substituent at position R1 in the instant compound is a 2° amine while that of Burdette et al., is a 3° amine. However, 2° and 3° amines are obvious variants. *Ex parte Bluestone*, 135 USPQ 199 (1961). Also, intended use is not a limitation of a compound or product. *In re Hack*, 114 USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949). Even then, something old or obvious does not become new upon discovery of new properties, functions or utilities, *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977).

Applicant missed the point on the role of Burdette et al., in the instant case. The prior art of Lee et al., is like a bush having many trees. The instant compounds are the trees by Lee et al., selected by applicant. Burdette et al., do not disclose the trees but provided the road

Art Unit: 1625

leading to the trees. Applicant should note that the selection of "some" among many is prima facie obvious, *In re Lemin*, 141 USPQ 814 (1964).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Application/Control Number: 10/528,862

Page 5

Art Unit: 1625

A handwritten signature in black ink, appearing to read 'Taofiq Solola', with a stylized flourish at the end.

TAOFIQ SOLOLA
PRIMARY EXAMINER

Group 1625

August 21, 2007